**Project 2 Proposal**

Thursday, March 1, 2018

Iman Jani, Albert Doan, Todd Fox, Dana Pong

Our website is to help users to decide their mode of transportation (Uber vs. bike) to get from a user-defined point A to point B within San Francisco. Decision-making factors include current weather, price estimate of an Uber, proximity and info of nearby bike stations. This can be a helpful tool to San Francisco pedestrians. There are many cool visualizations out there already. We want to exercise our skills in trying to emulate plus put it all together in one website.

1. User inputs
   1. Current location (within San Francisco)
   2. Destination (within San Francisco)
   3. Number of passengers
2. Auto-calculated:
   1. Current date, time, weekday
3. Map to show current user location
4. Map nearest bike stations (and currently available bikes?)
   1. Data Source: <https://www.kaggle.com/benhamner/sf-bay-area-bike-share>
   2. Data Source: <http://babs.virot.me/>
   3. Data Source: <https://cloud.google.com/bigquery/public-data/bay-bike-share>
5. Heat Map of historical pick up and drop off points
   1. Example of Map and Graph: <http://tncstoday.sfcta.org/>
   2. Underlying Data Source: <http://www.sfcta.org/tncstoday>
6. Recreate line graph on <http://tncstoday.sfcta.org/> weekday vs. #pick up/drop offs
   1. Note: For line graph, we don’t need to use the geolocation data (“transit analysis zone” shapefile data)
7. Scrape current weather
   1. <https://openweathermap.org/>
8. Display current Uber price estimate
   1. Uber API GET price estimates <https://developer.uber.com/docs/riders/references/api/v1.2/estimates-price-get>

**Notes:**

The data above will be housed in either MongoDB, SQLite, MySQL

There will be at least 3 views (welcome page, user input page…)

Use of a new JS library - TBD

Examples of inspiration:



